



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,968	03/05/2002	Richard B. Streeter	VIA-17	7502

7590 05/19/2005
Pandiscio & Pandiscio
470 Totten Pond Road
Waltham, MA 02154

EXAMINER

PELLEGRINO, BRIAN E

ART UNIT	PAPER NUMBER
----------	--------------

3738

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,968

Applicant(s)

COHN ET AL.

Examiner

Brian E Pellegrino

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3/10/05.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/10/05 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cardon et al. (5383892) in view of Kleshinski (5755778). Cardon et al. show a bendable elongated body with a spring segment 2 connecting proximal and distal ends. Cardon also discloses that at least two spring segments can be used, col. 2, lines 3,4,6. Cardon additionally discloses the spring segment is made of an elastic material that stretches when expanded to the second configuration, col. 2, lines 49-53. Fig. 2 shows the second length is shorter than the first length. However, Cardon does not disclose that there is a plurality of barbs on fixed length sections of the proximal and distal ends or that a shape memory metal is used for the spring section. Kleshinski teaches (Fig. 1)

Art Unit: 3738

fixed length sections (**14,16**) at the proximal and distal ends and contain a plurality of barbs **20**. Kleshinski also teaches stent framework can be made of shape memory material to enable temperature transition to transform the shape to a second configuration, col. 6, lines 7-17. It would have been obvious to one of ordinary skill in the art to incorporate the barbed proximal and distal end sections with the stent of Cardon such that it enables the device to be anchored in the patient's vessel.

Additionally, with respect to claim 3, it would have been obvious to one of ordinary skill in the art to incorporate shape memory material as taught by Kleshinski for the spring segment of Cardon such that it eliminates the use of a balloon to expand the stent.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cardon et al. '892 in view of Kleshinski '778 as applied to claim 4 above, and further in view of Solem et al. '432. Cardon as modified by Kleshinski is explained supra. However, Cardon in view of Kleshinski fail to disclose barbs on intermediate section. Solem et al. teach (Fig. 3) that the intermediate section of the stent includes barbs **10**. It would have been obvious to one of ordinary skill in the art to incorporate barbs also on the intermediate section as taught by Solem with the stent of Cardon as modified by Kleshinski such that it further limits the stent from movement or dislodges from the target site it was implanted.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Solem et al. '432 in view of Kleshinski '778. Solem et al. disclose a method of reducing mitral regurgitation by placing a prosthesis into the coronary sinus to reduce the gap between leaflets, col. 4, lines 19-21,38,39. Solem also discloses the device is made of a shape

memory alloy (col. 3, lines 38-41) which inherently enables the device to transform from a first configuration to a second configuration. It can be seen (Fig. 3) the device is a spring-like structure with barbs that extend from end to end. However, Solem does not disclose that there are fixed length sections at the proximal and distal ends. Kleshinski discloses (Fig. 1) fixed length collars including barbs at the proximal and distal ends of a tubular prosthesis. Kleshinski also teaches the collars hold on the tubular graft material that provides a fluid tight seal in the patient's vessel, col. 3, lines 14-17,40-45. It would have been obvious to one of ordinary skill in the art to incorporate the collars and graft as taught by Kleshinski with the stent of Solem such that it prevents blood leakage in the patient.

Response to Arguments

Applicant's arguments filed 3/10/05 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combination of Cardon in view of Kleshinski appears to be misconstrued in review of Applicant's remarks. The Examiner is only relying on Kleshinski for incorporation of barbs on the stent of Cardon. Cardon clearly discloses the invention as claimed and shows in Fig. 2 that the central portion (spring element) has a second length shorter than the first given length and thus with Kleshinski's

Art Unit: 3738

teaching the combination results in the claimed invention. With respect to claim 12, Solem as admitted by Applicant's remarks discloses a spring device that has an extended state and contracted state and the Examiner suggested in the rejection that the combination with Kleshinski is to incorporate the two end fixed length collars with the apparatus of Solem. Thus, the combination would result in the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Pellegrino whose telephone number is (571) 272-4756. The examiner can normally be reached on Monday-Thursday from 6:30am to 4pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached at (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC 3700, AU 3738

BRIAN E. PELLEGRINO
PRIMARY EXAMINER

